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Implementation of the Free Nutritious Meal Program: An Analysis of Household Adaptation and Social Welfare in the Strategic Area of Adisutjipto Air Force Base, Sleman

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ABSTRACT

The Free Nutritious Meal (*Makanan Bergizi Gratis*, MBG) program is a strategic instrument of the Indonesian government that functions as a multidimensional Social Safety Net (SSN) to enhance human resource quality. This study analyzes the implementation of the MBG program at the Nutrition Fulfillment Service Unit (*Satuan Pelayanan Pemenuhan Gizi*, SPPG) of *Lanud Adisutjipto*, its impact on household economic adaptation strategies through Household Expenditure Switching (HES), and its influence on food security dimensions. The research method employed is descriptive qualitative, with data triangulation techniques including participatory observation, in-depth interviews with key actors (policymakers, technical implementers, local workers, and parents), and visual documentation. The results indicate that MBG implementation at SPPG *Lanud Adisutjipto* is effective, characterized by strict hygiene standards and high operational efficiency; local supply chain innovations reduced preparation time by up to 75%. Economically, the program significantly saves 10-15% of household food expenditure (approximately IDR 300,000 to IDR 500,000 per month), which households subsequently redirect toward children's education investments. Furthermore, the program creates a multiplier effect by employing 94% local labor. In terms of food security, standardized nutritional access contributed to reducing stunting prevalence in the Berbah region to 3.2% by 2025. However, behavioral challenges such as food neophobia (vegetable rejection) among students remain an obstacle to optimizing food utilization. This study concludes that the MBG program is a strategic human capital investment that requires cross-sectoral synergy for sustainability.

Keywords:

Free Nutritious Meal; Social Safety Net; Household Adaptation; Food Security; Human Capital Investment.

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INTRODUCTION

The Free Nutritious Meal (*MBG*) program is positioned as a vital instrument in Indonesia's social protection architecture, with the long-term goal of realizing superior human resources (*SDMan*) through nutritional improvement. This positioning is regulated through Presidential Regulation (*Perpres*) Number 83 of 2024, which appoints the National Nutrition Agency (*BGN*) as the executor of duties. Conceptually, *MBG* functions as a Social Safety Net (*JPS*) through in-kind transfers that aim to reduce the burden of household expenditure and encourage the Diversion of Household Expenditures (*PPRT*) for non-food needs. This program is expected to strengthen national food security and improve the nutritional quality of school-age children as part of Indonesia's long-term investment in human development (Cahyaharnita et al., 2021; Firdaus & Maulana, 2025; Indriasari et al., 2021; Lestari et al., 2024).

The implementation of *MBG* is inseparable from structural and governance complexity (Kull et al., 2018; Mälly, 2018). On a macro level, the program faces the dilemma of fiscal limitations, where large allocations of funds have the potential to disrupt or reduce the

effectiveness of other social protection programs that are already running and have more specific nutritional targets, such as *Posyandu* assistance and the provision of additional food for toddlers. On the other hand, sharp criticism from civil society highlights weak governance, potential corruption, conflicts of interest, and food security issues that have caused thousands of cases of food poisoning in school children (Dubbels, 2020; Duncan, 2015; Herbert & Marquette, 2021; Indriasari et al., 2021; Khan et al., 2024). This shows that the success of *MBG* depends not only on budget adequacy but also on the effectiveness of the surveillance system, supply chain transparency, and community participation.

In a global context, the World Health Organization (*WHO*) and UNICEF (2023) emphasized that malnutrition is one of the main causes of low productivity and education disparities in developing countries. Indonesia itself still faces complex nutritional problems: the national prevalence of stunting reaches 21.5% (SSGI, 2023), and anemia in school children has increased to 28%. This condition illustrates the urgency of school-based interventions as one of the most effective strategies to improve the nutritional status of children and adolescents. School is not only a place of learning but also a means of forming healthy living behaviors and consuming nutritious food (Hamed Kandil, 2022; Jung et al., 2019; Oostindjer et al., 2017; Willett et al., 2017).

The *Free Nutritious Meal Program* (*Implementation of the Free Nutritious Meal Program: An Analysis of Household Adaptation and Social Welfare in the Strategic Area of Adisutjipto Air Force Base, Sleman*) is a strategic initiative that aims to improve the quality of nutrition and learning motivation of students in Indonesia, based on data showing that 41% of students experience hunger while studying, which negatively impacts their concentration and academic achievement (Merlinda & Yusuf, 2025). This initiative is designed to address the problem of malnutrition, particularly among school children, which has historically been a significant barrier to learning capacity and cognitive development (Sujai et al., 2013). This program is in line with the fifth precept of Pancasila, namely "Social Justice for All Indonesian People," by providing equitable access to nutrition regardless of socioeconomic background (Andin et al., 2024). Furthermore, *MBG* also plays an important role in the formation of quality human resources to support national resilience (Sarjito, 2024). This kind of initiative not only focuses on nutritional aspects but also involves broader social and economic dimensions, such as empowering local communities and improving the quality of life in a sustainable manner (Dushkova & Ivlieva, 2024; Esteves et al., 2021; Hariram et al., 2023; Henfrey et al., 2023).

A number of previous research results show that school feeding programs have great potential to prevent malnutrition and improve student learning performance. Sekiyama et al. (2018) found that the provision of nutritious food in schools can increase study concentration and lower student absenteeism. Research by Karomah et al. (2024) confirms that similar programs in Indonesia have a positive impact on the nutritional status and learning motivation of elementary school students, although their implementation still faces obstacles in terms of distribution, kitchen infrastructure, and food quality. Furthermore, Pilco & Pilco (2023) found that the association between household food security and children's nutritional status was positively correlated with academic achievement. Sujai et al. (2013) also highlighted that increasing access to nutritious food at the household level is the main determinant of the success of improving the learning quality of elementary school children.

Although Indonesia has shown significant progress in addressing malnutrition, the latest data from the Indonesian Nutrition Status Survey (*SSGI*) in 2024 shows that the national stunting prevalence has dropped to 19.8%. This figure is lower than the target of 21.5% in 2023 and even below the *WHO*'s critical threshold (20%). This decline indicates that specific nutrition interventions, especially Supplementary Feeding (*PMT*) for toddlers in the First 1000 Days of Life (*HPK*), have worked effectively.

MBG's focus is on school-age children, who face different secondary nutritional issues, including a prevalence of anemia in Indonesia that still reaches 28%—caused by iron deficiency and directly affecting cognitive abilities and learning motivation.

Nutritional conditions that affect learning concentration are reflected in the performance of national education. Indonesia's PISA scores from 2012 to 2022 show a downward trend, especially the Reading Score, which dropped from 396 to 383, and the Science Score, which dropped from 382 to 359. Since the prevalence of stunting (chronic growth disorders in toddlers) has reached a relatively good point of 19.8%, the cost-effectiveness of *MBG* must be measured not only from efforts to reduce stunting at an early age but also from efforts to overcome acute and chronic nutritional problems at school age that cause hunger and anemia. This program is a crucial investment to secure the quality of human resources who have been successfully saved from severe stunting, with a focus on improving cognitive performance, so that it can slow or even reverse the trend of declining PISA scores.

In addition, *MBG* also has an important microeconomic dimension. This program can reduce household expenses for children's food consumption, so that the funds can be diverted to education, health, or family savings needs. On the other hand, this policy also opens up economic opportunities for local small and medium enterprises (*MSMEs*) who are involved as food providers. Thus, this program not only has a direct impact on improving child nutrition but also encourages regional economic growth through strengthening local supply chains and creating new jobs. In the long term, *MBG* has the potential to be a driving force for a community-based social economy, if managed transparently and involving active community participation.

The success of this program is highly determined by the synergy between the central and regional governments. In the context of fiscal decentralization, regions have great authority to manage the technical aspects of program implementation, including food procurement, distribution mechanisms, and quality control. Therefore, the capacity of regional institutions in managing programs is the key to sustainability. Problems arise when institutional capacity is inadequate, oversight is weak, or there is no data integration between the educational, health, and social sectors. This condition can cause inequality in the quality of implementation between regions and weaken the national goal of *MBG* as a social justice program.

The Adisutjipto Air Base area adjacent to Maguwoharjo Village, Depok District, Sleman, has unique socio-economic characteristics. This area is an urban zone with the highest population density in Sleman Regency and has a Poverty Line (*GK*) that is sensitive to food inflation. Although the poverty rate is relatively low, the absolute number of poor people is increasing every year, indicating the emergence of new vulnerable groups. This shows that people in this region are more easily affected by changes in food prices and economic shocks, which has the potential to affect the nutritional consumption of families and school children.

In addition to the economic aspect, the socio-cultural dimension also has a major influence on the acceptance and effectiveness of *MBG*. Food preferences, consumption habits, and parents' perceptions of school meals are important factors that determine the success of the program. In many cases, children are reluctant to consume the food provided because of the taste or appearance that does not match local customs. Therefore, participatory approaches involving communities and schools need to be strengthened so that *MBG* is not only accepted administratively but also socially and culturally.

Furthermore, *MBG* is also closely related to national development targets as stated in the National Long-Term Development Plan (*RPJPN*) 2025–2045 and the Sustainable Development Goals (*SDGs*), especially Goal 2 (Zero Hunger) and Goal 4 (Quality

Education). Thus, the implementation of *MBG* has a strategic position as a bridge between food policy, education, and poverty alleviation. However, to ensure the sustainability of the program, it is necessary to conduct an empirical data-based evaluation that measures the real impact on household food security, children's nutritional status, and changes in consumption behavior in the community.

Based on these various descriptions, this research is important to carry out. First, to understand how households in densely populated and food-inflation-prone environments such as Sleman adapt their behaviors to *MBG* interventions, including in terms of Household Expenditure Diversion (*PPRT*) and gender roles in food management. Second, to measure the real impact of the program on the dimension of food security, especially nutritional diversity that plays a role in stunting mitigation. Third, to evaluate the reflection and adaptation of national governance at the local level. Thus, this research is expected to make an empirical and theoretical contribution to the development of more effective and equitable nutrition-based social protection policies in Indonesia.

This study aims to analyze the implementation of the Free Nutritious Meal Program (*MBG*) as a Social Safety Net (*JPS*) in the social protection system in Indonesia, focusing on its impact on household adaptation strategies, including Household Expenditure Diversion (*PPRT*). This study also describes changes in the gender roles and social welfare of beneficiary communities and examines the influence of *MBG* on household food security, especially in increasing access, availability, and utilization of diverse nutritious foods. In addition, this study identifies challenges in program governance, opportunities for local economic integration, and formulates strategic recommendations to improve the effectiveness of *MBG* implementation at the local level, with case studies in the Sleman and Adisutjipto Air Base areas.

The study offers multidimensional benefits. Academically, it enriches literature on social protection, food security, and public policy, particularly in military-supported school nutrition programs. Practically, the findings provide valuable evaluation material for central and regional policymakers to refine *MBG* program design, implementation, and monitoring. For implementers like the National Nutrition Agency (*BGN*) and local governments, the research offers insights into operational strategies, community acceptance challenges, and local supply chain strengthening. For communities, especially beneficiary households, it highlights tangible socioeconomic impacts, encouraging greater participation and advocacy. Ultimately, a comprehensive understanding of *MBG* supports national goals in stunting reduction, education quality improvement, and quality human resource development for Indonesia's future.

METHOD

This study employed a descriptive qualitative approach with a policy case study method to understand the implementation and governance of the Free Nutritious Meal Program (*MBG*) and its impact on social welfare at Adisutjipto Air Base, Sleman. A descriptive approach was chosen to describe social phenomena without manipulating variables, focusing on the meaning and relationships between components in the *MBG* program implementation (Creswell & Creswell, 2017). Data collection techniques included direct observation, semi-structured interviews, and documentation to obtain empirical data from various stakeholders directly involved in the program (Sugiyono, 2022). Informants were selected using purposive sampling techniques based on criteria relevant to the *MBG* program, such as officials from Adisutjipto Air Base, the Social Service, the Sleman Health Office, school principals, and beneficiary families.

Data analysis in this study was conducted inductively by organizing data into categories, reducing irrelevant information, and presenting data in an easy-to-understand

form (Sari et al., 2022). The analysis process involved data collection through triangulation, data reduction to summarize important information, and data presentation in the form of descriptions or charts (Moleong, 2011). Conclusions were drawn through verification to identify new findings that more clearly illuminated the implementation of the *MBG* program, which were then used to prepare recommendations for improving social programs in the region (Abdussamad, 2022).

RESULTS AND DISCUSSION

Observation Data

Observations were carried out in a participatory manner in two main locations, namely the SPPG production kitchen and the beneficiary schools. The purpose of observation is to verify the suitability of the implementation of the program with SOPs and identify social dynamics that arise in the field.

A. Kitchen Operational Analysis and Food Hygiene

The observation results showed that all food processing officers used complete Personal Protective Equipment (PPE), including medical masks, head coverings (hairnets), and plastic gloves. The production process follows a one-way flow to prevent cross-contamination. Operational efficiency can be seen from changes in the mechanism of providing raw materials, especially vegetables that have been chopped by local suppliers. This innovation reduces the preparation time from ±4 hours to ±1 hour, without compromising nutritional quality.



Figure 1. Food processing activities with complete PPE in the kitchen of SPPG Adisutjipto Air Base.
Source: Direct research documentation (2025)

B. Distribution and Response Mechanisms in Schools

The food arrived at the school in a sealed condition and was distributed by uniformed officers of the "Indonesian Air Force Nutrition Fulfillment Service Unit".3 At SDN Kalongan, students were observed to have an orderly queuing culture and showed expressions of high satisfaction when receiving a complete menu.3 However, minor

behavioral challenges were found where some students tended to set aside vegetables (capcay/caisim) because they were not used to a high-fiber diet. Food distribution is carried out every day using food grade containers made of SUS304 stainless steel. The food arrived at the school in a sealed condition and was distributed in an orderly manner by officers in official uniforms of the Indonesian Air Force.

At SDN Kalongan, students show queuing behavior and positive expressions when receiving food. However, a minor phenomenon was found in the form of students' tendency to set aside certain vegetables, which indicated a challenge in adapting consumption patterns.



Figure 2. The process of distributing MBG in the elementary school environment.
Source: Direct research documentation (2025)

Interview Results Data

The in-depth interview was conducted to explore the understanding, experience, and perception of key actors who are directly or indirectly involved in the implementation of the Nutritious Eating Program (MBG) at SPPG Adisutjipto Air Base. Informants are selected purposively by considering their strategic position, operational involvement, and perceived direct impact. The results of the interviews were analyzed thematically to reveal the substantive meaning behind the implementation of the policy.

1) Managerial and Strategic Perspectives

a. Views of National Policymakers

TNI Marshal Mohamad Tonny Harjono as Chief of Staff of the Air Force (KSAU) emphasized that the MBG Program is not just a food aid program, but part of a national strategy in human resource development and national resilience. In an in-depth interview, he stated:

"This nutritious eating program should not be understood only as the distribution of food. This is the country's long-term investment in the quality of future generations. We in the Indonesian Air Force see that the fulfillment of child nutrition today will determine the strength of the nation in the future."

KSAU emphasized the importance of local economic empowerment as an integral part of program implementation. According to him, the success of MBG is not only measured by the number of portions distributed, but also by the extent to which this program is able to drive the economy of the community around the base:

"We instruct that raw materials be taken from local farmers and business actors. Of the approximately 50 personnel who work in one SPPG unit, almost all of them are local residents. This is not a coincidence, but a policy design."

This statement shows that the MBG policy is designed with a multidimensional policy approach, which integrates nutritional, economic, and social aspects simultaneously.

b. Program Technical Manager's Perspective

The Head of SPPG of Adisutjipto Air Base, Dea Nuraini, highlighted aspects of operational discipline and logistics management as the key to the success of the program. In the interview, he explained in detail the daily production flow:

"Every day we start production at three in the morning. Everything has been strictly scheduled, starting from the preparation of ingredients, the cooking process, packaging, to distribution. There is no room for delays because our target is that the food must be received by the children before the break."

Respondents also emphasized that the standards applied are not only administrative, but concern the safety and quality of nutrition:

"We work with healthy kitchen standards. All food handlers are required to use complete PPE. This is not just a rule, but our commitment to children's food safety."

According to the Head of SPPG, the biggest challenge lies precisely in the consistency of implementation in the field:

"The production of thousands of portions every day is not easy. But with military-style discipline and solid teamwork, thank God it can run stable."

2) Local Workforce Perspective and Community Empowerment

Interviews with local workers reveal a humanitarian dimension of the MBG Program that is often overlooked in statistical reports. Ibu Suratina, one of the workers in the SPPG kitchen, shared her background before joining the program:

"I used to have a stall, but since the 2006 earthquake, my family's economic condition has declined. I didn't have a permanent job. When there was this program, I felt like I was given a second chance."

Respondents added that working at SPPG provides a sense of economic and psychological security:

"Now I have a steady income. Every month you can manage your home needs without worry. Most importantly, I feel valued and can still be productive."

This recognition shows that the MBG Program functions as a mechanism for economic recovery at the micro level, especially for vulnerable groups such as women and productive elderly. This program not only provides employment, but also restores confidence and social dignity.

3) A Perspective of the Beneficiary Household

In terms of indirect beneficiaries, interviews with parents provide an overview of the economic and social impact of the program at the household level. Mrs. Iin, a parent at one of the MBG recipient schools, shared a significant change in family consumption and spending patterns:

"Before this program, every day I had to prepare provisions or pocket money. Now that spending has decreased quite a lot."

Respondents also highlighted changes in their child's eating behavior:

"My son used to have difficulty eating, especially vegetables. But since being able to eat nutritious food at school, she has become more voracious. In fact, they often tell us what the menu is that day."

According to Mrs. Iin, the savings obtained are diverted to long-term needs:

"I can now set aside money that is usually spent on snacks for children's school savings."

These findings reinforce the indication that the MBG Program acts as a substitute for household food spending, allowing families to invest in aspects of children's education and future.

Overall, the results of the in-depth interview showed that the MBG Program at SPPG Adisutjipto Air Force Base was positively perceived by all informant groups. From a policy perspective, this program is seen as a national strategic investment. From the implementation side, the program requires high discipline but provides professional satisfaction. Meanwhile, for local workers and beneficiary households, this program brings a sense of economic security and improved quality of life. The findings of this interview strengthen the results of observation and documentation, and become an analytical basis in the discussion of household economic adaptation, local multiplier effect, and the concept of human security in the next subchapter.

Documentation Results Data

The data from the documentation in this study was obtained through the collection and review of official documents of the Nutrition Fulfillment Service Unit (SPPG) of Adisutjipto Air Base, operational reports of the National Nutrition Agency (BGN), daily distribution archives, and visual documentation in the form of photos of activities during the implementation of the Nutritious Eating Program (MBG). Visual documentation was collected directly by the researcher during the production, distribution, and receipt of nutritious food activities at the target schools.

The use of photo documentation in this study aims to strengthen the results of observations and interviews through visual evidence, while supporting the validity of the data with the source triangulation technique.

1. Documentation of the Nutritious Food Production Process

The production process documentation describes food processing activities in the kitchen of the SPPG Adisutjipto Air Base. In the accompanying visual documentation, it can be seen that food handlers carry out the cooking and packaging process of food using complete Personal Protective Equipment (PPE), such as masks, hairnets, and gloves. This activity reflects the implementation of hygiene and food safety standards in accordance with the operational procedures set by the National Nutrition Agency.

The documentation also shows the condition of a neatly arranged kitchen, the use of stainless steel equipment, and a well-organized workflow. This narrative corroborates observational data regarding the capacity and consistency of daily production that is able to meet the needs of thousands of portions of nutritious food every day.



Figure 3. MBG Production or Cooking Process
Source: Direct research documentation (2025)

2. Documentation of the Process of Food Distribution to Schools

The distribution documentation shows the process of delivering nutritious food from the SPPG kitchen to the beneficiary schools. In the accompanying visual documentation, it appears that SPPG operational vehicles are used to distribute food in closed and hygienic

conditions. The distribution process is carried out on a scheduled basis by paying attention to the timeliness so that the food can be received by students before school breaks.

In addition, this documentation also shows the process of handing over food at school which is carried out in an orderly and coordinated manner between SPPG officers and the school. This confirms that the distribution mechanism of the MBG Program is carried out in an accountable and responsible manner.



Figure 4. The Process of Distributing Food to School
Source: Direct research documentation (2025)

3. Documentation of Food Receipt and Consumption by Students

The documentation of food reception by students shows the atmosphere of food distribution in the school environment. In the accompanying visual documentation, students can be seen queuing in an orderly manner before receiving nutritious food. After receiving the food, the students appeared to eat food together in the school environment.

This documentation supports the findings of observations related to the formation of a culture of discipline and positive affective responses of students to the MBG Program. The students' enthusiastic expressions seen in the visual documentation are a good indicator of acceptance of the food menu provided

4. Documentation of Nutritious Food Menu and Composition

The menu documentation features a daily nutritious meal package served to students. In the visual documentation included, you can see the composition of food consisting of carbohydrate sources, animal and vegetable proteins, vegetables, fruits, and milk. The

composition reflects the application of the principles of balanced nutrition and food diversification.

This documentation corroborates written data on menu planning by nutritionists that is adjusted to the Nutritional Adequacy Rate (AKG) of elementary school-age children. In addition, documented menu rotation shows efforts to prevent consumption saturation in students.



Figure 5. Menu and Nutritional Content
Source: Direct research documentation (2025)

5. Documentation of Program Supporting Facilities and Infrastructure

Documentation of facilities and infrastructure shows the supporting facilities of the MBG Program at SPPG Adisutjipto Air Base, such as production kitchens, cooking utensils, raw material storage rooms, and distribution vehicles. This visual documentation shows that SPPG has adequate and standardized infrastructure to support the sustainability of the program.

In addition, the documentation of agricultural land in the Adisutjipto Air Force Base environment illustrates the use of internal resources as part of the strategy of food security and raw material independence in the long term.



Figure 6. SPPG Facilities and Infrastructure
Source: Direct research documentation (2025)

All photo documentation included in this study serves as supporting evidence to strengthen the validity of the observation and interview data. Visual documentation is used as part of the data triangulation technique, so that the research results have a higher level of credibility and reliability.

Data Triangulation

Data triangulation in this study is used as a technique to test the validity and credibility of the data obtained. Triangulation is carried out by comparing and combining data sourced from observations, in-depth interviews, and documentation, so that a complete and consistent picture is obtained regarding the implementation of the Nutritious Eating Program (MBG) at the Nutrition Fulfillment Service Unit (SPPG) of Adisutjipto Air Base. The use of data triangulation is important considering that this study uses a qualitative approach, where the validity of the findings does not depend only on one data source, but on the suitability of meanings that emerge from various data collection techniques.

1. Data Source Triangulation

Source triangulation was carried out by comparing information obtained from various informants who had different roles and interests in the MBG Program. Information on program objectives, implementation mechanisms, and economic impacts was obtained from policymakers, technical managers, local workforce, and beneficiary households.

For example, the statement of the Indonesian Air Force KSAU, which emphasizes that the MBG Program is a long-term strategic investment for human resource development, was confirmed by the Head of SPPG through an explanation of operational discipline and timeliness of food distribution. Meanwhile, the statements of local workers and guardians corroborated the real impact of the program on improving economic welfare and household consumption patterns. The compatibility of the views between the informants shows that the implementation of the MBG Program is understood consistently at various levels, both at the policy, implementer, and beneficiary levels. The following table summarizes the synthesis of findings based on the validation of various data sources:

Table 1. Triangulation of Research Data

Research Variables	Observational Findings & Documentation	Interview Findings	Wellbeing Analysis
Household Adaptation	Massive daily staple shopping volume.	Guardian Student confirms Cost savings.	**10-15% expense reallocation from Total Shopping for Family Food.[3]**
Social Welfare	Involvement 94% of the local workforce (47 out of 50 people).	Elderly feel Empowered economically.	**Meet "Social Opportunity" criteria in Midgley's theory.[3] The Gospel of Jesus**
Status Nutrition (Stunting)	**Menu compiled by BGN nutritionists Suitable PGS standard.**	**The Health Office noted a trend of improving nutritional status.**	**Prevalence of stunting in Berbah dropped significantly to 3.2% in 2025.[3]**

Source: Researcher's analysis based on observation, interview, and documentation results (2025)

2. Triangulation of Data Collection Techniques

The triangulation technique was carried out by comparing the results of field observations, in-depth interviews, and documentation. The observation results show high compliance with hygiene standards and workflow efficiency in the SPPG kitchen. This finding was strengthened by the results of an interview with the Head of SPPG who explained the implementation of healthy kitchen SOPs and production time discipline.

Furthermore, visual documentation in the form of photos of production and distribution activities supports the observation findings by displaying the use of Personal Protective Equipment (PPE), organized kitchen conditions, and hygienic and scheduled food distribution processes. Thus, the data obtained through observation, interviews, and documentation show a consistency that reinforces each other.

3. Time Triangulation

Time triangulation was carried out by collecting data at different times to see the consistency of the implementation of the MBG Program. Observation and documentation were carried out on several days of food production and distribution, while interviews were conducted at different times with the same or different informants.

The results of time triangulation show that the process of production, distribution, and receipt of nutritious food takes place consistently from day to day, both in terms of the number of portions, the timeliness of distribution, and the implementation of hygiene standards. This consistency shows that the implementation of the MBG Program is not incidental, but has become a structured operational routine.

Based on the triangulation of sources, techniques, and time, it can be concluded that the data obtained in this study has a high level of trust. The alignment between observations, interviews, and documentation shows that the research findings are valid and can be accounted for academically.

The data triangulation also strengthens the conclusion that the Nutritious Eating Program at SPPG Adisutjipto Air Force Base is not only effective in terms of technical implementation, but also has a real social and economic impact on the local community and beneficiary households.

With the application of data triangulation, this study fulfills the principles of credibility, dependability, and confirmability in qualitative research. Therefore, the results of this study are considered suitable for use as a basis for analysis and policy

recommendations related to the implementation of the Nutritious Eating Program in other regions.

Discussion

The development of the quality of human resources is an absolute prerequisite for a country to get out of the middle-income trap. In the Indonesian context, health challenges such as stunting and malnutrition are still significant structural barriers. In response, the government launched the Free Nutritious Eating Program (MBG) as an instrument of a multidimensional social safety net. This program fills the research gap from previous policies, such as Raskin, which only focuses on carbohydrate food security or PMT-US which is often incidental. MBG comes with a holistic approach through the provision of complete nutrition every school day that is integrated with local economic empowerment. This report presents an in-depth analysis of the implementation of MBG at SPPG Adisutjipto Air Force Base with a review of Social Development and Human Security theory.

Implementation of the MBG Program as a Social Safety Net (JPS) in Indonesia

The implementation of MBG at SPPG Adisutjipto Air Force Base reflects the paradigm shift of the Social Safety Net (JPS) from just survival to recovery and reinforcement (bounce back). Theoretically, JPS aims to protect the community from the shock of the crisis so that it does not fall into the deeper abyss of poverty.

Based on the results of observations, SPPG's kitchen operations show high standards that are in line with the concept of Human Security, especially protection from hunger and malnutrition as a threat to life. Officers use complete PPE (masks, hairnets, gloves) and implement a one-way flow flow to ensure food safety. The innovation in the use of chopped vegetables from local suppliers has succeeded in increasing the efficiency of production time from ±4 hours to ±1 hour. This operational discipline was validated through an interview with the Head of SPPG who stated that daily production starts at 03.00 WIB to ensure the timeliness of distribution before school breaks.

From a public policy perspective, MBG is a form of positive state obligation to ensure dignified living conditions. KSAU TNI Marshal Mohamad Tonny Harjono emphasized that MBG is a long-term investment for the quality of future generations, not just food distribution. This shows that the MBG at SPPG Adisutjipto Air Force Base is not just a technocratic policy, but the realization of equitable social justice in accordance with the fifth precept of Pancasila.

The Impact of MBG on Household Adaptation Strategies and Expenditure Diversion

The MBG program has a direct economic impact through the Household Expenditure Diversion (PPRT) mechanism. The PPRT theory states that assistance in the form of in-kind (food) indirectly replaces part of family consumption expenditures, thereby increasing people's purchasing power.

Research data shows that there are savings between IDR 300,000 to IDR 500,000 per child per month for parents. An interview with the informant (Mrs. Iin) confirmed that the family reallocates a budget of 10-15% of the total daily food expenditure for other needs, such as education savings. This proves that MBG functions as an economic cushion for low-income families.

In addition, the social impact of the program is aligned with James Midgley's Social Development Theory, specifically the principle of "Social Opportunity". The involvement of 94% of local workers (47 out of 50 people) at SPPG Adisutjipto Air Force Base creates jobs that increase social dignity. The worker informant (Mrs. Suratina) stated that this program provides a sense of economic security and dignity because they remain productive

despite their old age. Through data triangulation, the consistency between household savings and local workforce empowerment shows that MBG has succeeded in reducing social inequality at the grassroots level.

The Influence of MBG on the Dimension of Food Security at the Household Level

MBG strengthens the dimension of food security, especially in the aspects of accessibility and utilization of nutritious food according to the Nutritional Adequacy Rate (AKG) standard. The results of the documentation show that the daily menu at SPPG is designed by nutritionists including carbohydrates, animal/vegetable proteins, vegetables, and milk. This significantly increases households' access to diverse foods that were previously difficult to reach due to cost constraints. However, observations in the field identified behavioral challenges in the form of food neophobia, where some students set aside vegetables (capcay/caisim). Theoretically, this has to do with the descriptive sensory of children who tend to reject new tastes. Proposed strategies to address this are visual modification of menus (such as vegetable nuggets) and the role of teachers as role models in nutrition education.

The long-term impact of this food use can be seen in the nutritional status of the community. Triangulation with official data from e-PPGBM 2025 shows that the prevalence of stunting in the Berbah area has dropped to 3.2%, the lowest figure in Sleman Regency. This success proves that structured nutrition interventions through MBG are able to respond to the challenge of malnutrition more effectively than conventional food assistance programs. Thus, MBG contributes to the formation of a healthy and productive Human Capital for the future of Indonesia.

CONCLUSION

The implementation of the Free Nutritious Meal Program (*MBG*) as a Social Safety Net (*JPS*) proved successful, leveraging military infrastructure (TNI AU) through SPPG to ensure operational discipline, strict food hygiene, and high production efficiency at Adisutjipto Air Force Base—transforming it from mere food aid into a strategic investment in national human resource development. Key impacts included Household Expenditure Diversion (*PPRT*), enabling families to save IDR 300,000–500,000 per child monthly; employment of 94% local workers, boosting social dignity and opportunities for vulnerable groups; and significantly increased access to balanced nutritious food (*B2SA*), reflected in Berbah's stunting rate dropping to 3.2% by 2025. Despite these gains, food neophobia among school children remained a key behavioral challenge hindering optimal utilization. Future research could explore longitudinal interventions, such as sensory-based education programs, to address neophobia and enhance long-term nutritional adherence.

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